

DECISION MEMO

DIVIDE PEAK HABITAT IMPROVEMENT PROJECT

U.S. FOREST SERVICE

T14N R85W SECTIONS 5- 8, T14N R86W SECTIONS 1- 6, 8-12, 14, 15, T15N R85W SECTIONS 6, 7, 17-20, 28-33, T15N R86W, T15N R87W SECTIONS 1-7, 9-17, 20-27, 35, 36, T16N R.86W SECTIONS 26-36, T16N R87W SECTIONS 14, 15, 21-36

BRUSH CREEK-HAYDEN RANGER DISTRICT

MEDICINE BOW-ROUTT NATIONAL FORESTS & THUNDER BASIN NATIONAL GRASSLAND

CARBON COUNTY, WYOMING

MARCH, 2014

BACKGROUND

The purpose of this project is to improve wildlife habitat and lower fuel loads to reduce fire hazards. There is a need to re-introduce fire through prescribed burns to improve age class distribution. This will, in turn, improve wildlife habitat diversity and reduce surface fuel loading and arrangement. This will help to reduce future fire hazard.

The shrubland communities targeted for burning are primarily mountain big sagebrush and bitterbrush, with minor amounts of serviceberry and choke cherry. Burning would target primarily the sagebrush, bitterbrush, serviceberry, and choke cherry where these latter two species are present. The goals of the prescribed burns are: (1) to improve age class distribution in the shrubland communities, (2) to improve wildlife habitat diversity and (3) reduce fire hazard by reducing fuel loading.

The conifer encroached aspen stands will be treated by prescribed burning with emphasis on creating mortality in the conifer and standing aspen trees. The result will be regenerated aspen stands/clones with the competing conifer removed. There is also an additional benefit of reduced fire hazard in the treated areas. The conifer/aspen stands will be burned in late spring, when the dead surface fuels in the conifer stands have sufficiently dried out and adjacent shrublands are expected to be under green-up, or late in the fall.

The emphasis will be on creating a mosaic burn pattern where approximately 30% to 60% of the acres within each unit are burned. The shrubland communities targeted for prescribed burning are primarily mountain big sagebrush and bitterbrush, with minor amounts of serviceberry and choke cherry.

Approximately 8.9% of the acres within the proposed prescribed burn units are in the Strawberry Creek Roadless Area. No treatments are proposed on private land inholdings within the project area.

This project was originally part of the cancelled Savery project and has been carried forward as an individual project. There are no other associated proposed actions or activities.

DECISION

I have decided to authorize prescribed burns in both the shrubland and mixed conifer/aspen communities for a total of approximately 1,658 acres (1,236 shrubland and 422 aspen/mixed conifer), located in 37 separate polygons, which includes both primary and secondary burn units. Burning of aspen/conifer polygons 21 and 25 will depend on the BLM completing their NEPA process. Those two units will then be implemented along with adjacent BLM lands.

Prescribed burns will be conducted in the spring to ensure that the surrounding aspen and conifer stands will be holding snow and/or have sufficient duff and fine fuel moisture that they will not support a surface fire. Table 1(below) identifies the location and size of each prescribed burn. Seven prescribed burns will occur within the Strawberry Creek Roadless Area. See attached map for location of each prescribed burn.

No temporary roads or mechanical fireline construction is authorized. The prescribed burns will be implemented under the guidelines of an approved Prescribed Fire Burn Plan and smoke/emissions generated will follow Wyoming Department of Environmental Quality requirements.

Table 1: Authorized Prescribed Burns

PRESCRIBED BURN AREA	Acres	Type	ROADLESS AREA	ACRES WITHIN ROADLESS
2-1	13.4	Primary		
2-2	3.2	Primary		
2-3	7.8	Primary	Strawberry Creek	7.7
2-4	3.2	Primary	Strawberry Creek	0.6
2-5	12.3	Primary	Strawberry Creek	8.8
2a	355.2	Secondary	Strawberry Creek	76.5
3	19.9	Primary		
3a	32.8	Secondary	Strawberry Creek	18.1
4	28.5	Primary		
5	10.0	Primary		
6	50.6	Primary	Strawberry Creek	11.0
6a	27.8	Secondary	Strawberry Creek	24.6
7	108.3	Primary		
7a	23.3	Secondary		
7b	58.1	Secondary		

PREScribed BURN AREA	Acres	Type	ROADLESS AREA	ACRES WITHIN ROADLESS
7c	110.9	Secondary		
8	93.1	Primary		
9	42.6	Primary		
10	27.7	Primary		
11	10.5	Primary		
12	12.9	Primary		
13	23.6	Primary		
14	43.9	Primary		
15	11.4	Primary		
16	23.4	Primary		
17	22.1	Primary		
18	43.8	Primary		
18a	14.9	Secondary		
19	18.7	Primary		
20	16.1	Primary		
21	100.2	Primary		
22	16.7	Primary		
23	28.1	Primary		
24	95.3	Primary		
25-1	17.7	Primary		
25-2	64.8	Primary		
26	65.9	Primary		
TOTAL	1,658.6			147.3

**Note: Slight changes to the acres burned may occur as a result of implementing design criteria but will not result in a net increase in the total acres authorized for prescribed burns.*

This action is categorically excluded from documentation in an environmental impact statement (EIS) or an environmental assessment (EA). The applicable category of actions is identified in agency procedures as provided for in FSH 1909.15, Section 32.2 – Categories of Actions for Which a Project or Case File and Decision Memo Are Required, under 36 CFR 220.6(e)(6) – *Timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than 1 mile of low standard road construction.*

This category of action(s) is applicable because the prescribed burns will improve both wildlife habitat and timber stands and no temporary road construction is necessary. The Strawberry Creek Roadless area does not preclude the use of a categorical exclusion for management. The Forest Service has extensive experience with prescribed burns and there are no significant effects associated with these activities.

I find that there are no extraordinary circumstances that would warrant further analysis and documentation in an EA or EIS. I took into account the following resource conditions identified in agency procedures that should be considered in determining whether extraordinary circumstances might exist:

1. Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species:

- **Botany:** A botany reported dated 02/25/2014 was prepared based upon field surveys from 2008 & 2009. A list of threatened or endangered plant species that may occur in the DPHIP project area or may be affected by the proposed project was obtained from the U.S. Fish and Wildlife Service on February 21, 2014. Only one plant species, the Western Prairie Fringed Orchid (*Platanthera praeclara*), has potential to be affected by this project. The Western Prairie Fringed Orchid does not occur within the analysis area.

Four sensitive species were analyzed. A finding of may adversely impact individuals, but not likely to result in a loss of viability in the Planning Area, nor cause a trend toward federal listing was determined for Slender moonwort (*Botrychium lineare*) and Rabbit Ears gilia (*Ipomopsis aggregata ssp. Weberi*). A finding of no impact was determined for Silver willow (*Salix candida*) and Large Flower Triteleia (*Triteleia grandiflora*).

The 2009 Medicine Bow- Routt National Forests and Thunder Basin National Grassland Species of Local Concern list consists of 128 species, of which 73 are known or suspected to occur on the Sierra Madre portion of the Brush Creek/Hayden District of the Medicine Bow- Routt National Forest. Based on the pre-field review 57 species have potential to occur within the analysis area and 9 were documented during field surveys. With the implementation of design criteria, and the previous modifications to the burn areas, there are no concerns with impacts

- **Wildlife:** A report was prepared on 12/13/2013. There is core or general habitat for sage grouse in the project area so the DDCT (Density Disturbance Calculation Tool) was used. To summarize, the Wyoming Governor's Executive Order for sage-grouse prohibits burning sagebrush from March 15 to June 30. **However, WGFD recommends in their letter (p. 2) that we burn the 60+ acre sagebrush polygon near the Forest boundary near Methodist Creek/Spring Creek during the spring** because it will result in a mosaic more beneficial to sage-grouse, more likely to preserve native seed source,s and will be less vulnerable to cheatgrass invasion.
- **Fisheries:** An aquatic reported dated 11/21/2013 was prepared. There are no aquatic-dependent T&E species in the project area and no water depletions will occur from the Colorado River Basin, so there will be no effect to downstream species (Bonytail (*Gila elegans*), Colorado Pikeminnow (*Ptychocheilus lucius*), Humpback Chub (*Gila cypha*) Razorback Sucker (*Xyrauchen texanus*) or designated Critical Habitat for Colorado River fish species.

There will be no impact to Region 2 sensitive fish and amphibian species that occur in the project area. There will be a low degree of impact to the following Forest MIS species that occur in the project area; brook trout (*Salvelinus fontinalis*), brown trout (*Salmo trutta*), and rainbow trout (*Oncorhynchus mykiss*).

Treatment units are generally located away from riparian areas, so direct effects from prescribed burning are not expected to significantly impact fish or amphibian habitats or populations. Isolated mortality could occur to Region 2 Sensitive amphibians if they inhabit treatment units, however, due to the extent of treatment and proximity to apparently suitable habitats, any mortality would be extremely isolated and at the population or community scale, negative impacts to the population would be undetectable. Adverse impacts to aquatic habitats or fish or amphibian populations are not expected with this proposal, as any impacts to habitats or populations would be highly localized and generally of short duration.

- **Flood plains, wetlands, or municipal watersheds:** A hydrology report was prepared on 11/03/2013.
 - *Floodplains:* The project will maintain wetland and floodplain function by using BMPs to reduce any short term impacts to wetlands and floodplains.
 - *Wetlands:* Direct effects to riparian and wetland areas under the proposed action will be limited through the use of Best Management Practices to avoid ignition and construction of fireline in these areas. There are less than nine acres of wetlands within proposed burn units; actual acres of wetland within burn units will likely be less as units are defined on the ground and most of the wetland areas currently identified are on the margins of the proposed burn units. Indirect effects to riparian ecosystems may occur because the proposed action may burn a limited number of trees in riparian and wetlands areas, but the effects are expected to be minimal since most of the burn areas are non-forested and the aspen/conifer stands are primarily located outside of riparian areas.
 - *Municipal watersheds:* This project is located in the East Fork Savery Creek (140500030401) and North Fork Savery Creek (101800020801) sixth level HUC's, which are not a municipal watersheds and therefore there are no effects on municipal watersheds from this project.
 - *Other issues:* There are no perennial streams in the proposed burn units. Existing roads and natural barriers will be used for firebreaks, limiting the amount of constructed fireline that will be necessary for the project. Low and moderate severity burns with relatively few large areas of mineral soil exposed are expected for the burn. Erosion is likely to be greatest in steep terrain, with heavy forested fuels where fire severity may be highest. Due to the timing of the planned ignitions, some natural revegetation is likely by the time summer convective thunderstorms may occur; therefore erosion rates will be reduced. Natural revegetation is expected to be sufficient after three growing seasons to essentially return erosion rates to pre-burn conditions. While some erosion may occur and deliver sediment to some of the local streams in the project area, the effects are expected to be minor, localized, and short-term.

Limited or no water use is expected for control activities for this proposed

prescribed fire, so direct effects to streamflow regimes are expected to be negligible. Increased runoff may occur as a result of reduced infiltration from loss of soil organic matter and/or generation of water repellent soils in any high severity burn areas. Since low and moderate severity burns with relatively few large areas of mineral soil exposed are expected for the majority of the burn, increased runoff is expected to be minimal. While some increased runoff may occur and increase erosion and sediment delivery to some of the local streams in the project area, the effects are expected to be minor, localized, and short-term.

2. Congressionally designated areas such as wilderness, wilderness study areas, or national recreation areas – The project area is partially within the Strawberry Creek Roadless Area. Consultation with the Regional Office was completed prior to public scoping/comment and again before the decision. No issues or concerns were identified and the project was approved to proceed.
3. Inventoried roadless areas or potential wilderness areas – The project area is not located within or adjacent to any congressionally designated areas, therefore there would be no effect.
4. Research Natural Areas – The project area is not located within or adjacent to any Research Natural Areas.
5. American Indians and Alaska Native religious or cultural sites – The project area does not contain American Indian or Alaska Native religious or cultural sites, therefore tribal consultation is not necessary.
6. Archaeological sites, or historic properties or areas – To comply with the National Historic Preservation Act of 1966 (NHPA) and the management directives outlined in the Forest Plan, the Medicine Bow National Forest Service will use a combination of historic research and systematic cultural resource survey to identify historic properties in the proposed burn units prior to project implementation. Standard avoidance procedures will be used to ensure sites that are eligible for or listed on the NRHP will not be negatively impacted by project activities. If an eligible site cannot be avoided, the Forest Service, in consultation with Wyoming State Historic Preservation Office (SHPO), will develop site-specific mitigation measures to avoid adversely affecting the historic property. The design criteria (listed below) will be utilized to prevent any adverse impacts.
7. Other resource concerns:
 - **Range:** A report was prepared on 11/013. The proposed spring burns on big sagebrush/mixed mountain slopes shrub will kill big sagebrush and black sagebrush and stimulate sprouting of many of the other shrub species that may be present. Because a mosaic pattern is planned and no primary burn units are larger than about 110 acres, there should be ample big sagebrush seed nearby to allow for establishment of seedlings within a few years unless weather/climate are particularly unfavorable for seedling establishment. Some native grasses and forbs should temporarily increase in vigor and

productivity within a year or two of the burn as they respond to decreased competition with sagebrush and the release of nutrients from ash and decaying sagebrush roots. Temporary removal or reduction of big sagebrush canopy also makes more forage accessible to both domestic and wild grazing animals until the sagebrush and other shrubs get large enough to block access.

There are approximately 3 miles of allotment fence within or adjacent to proposed primary burn units and another 0.7 miles of fence within secondary burn areas. These fences will need to be protected from fire or repaired or reconstructed if they are exposed to fire.

Depending on how well the vegetation recovers after the first growing season and how it is utilized by livestock and/or wildlife, a second growing season of special management might be required. Post-burn management, therefore, may affect permittees on these three allotments in terms of intensity of management required or timing of use.

The most important cumulative effect of the proposed burns on rangeland health is the increased potential for introduction and spread of noxious weeds and other invasive plants. Development of the DPHIP proposed primary burn units was done in consultation with range and wildlife specialists in order to reduce the risk of increasing size and/or distribution of weed infestations, particularly cheatgrass.

- **Recreation & Travel Management:** The proposed burning would have no negative effects on recreationist in the project area. Spring burning would be of short duration with minimal impacts to recreationist. Limited snowmobiling would be occurring during this time of the year due to snow conditions typically becoming poor. Hikers would typically not be around during this time of year due to snow conditions. ORV use would be limited to the lower elevations due to typical snow conditions that impede ORV use. ORV use may occur in lower elevations for antler hunting.

With any of the recreation activities the burning could potentially displace individuals to other locations to recreate for short periods of time. Smoke created by the proposed burning may move individuals to less smoking areas, but would also be short lived. The proposed burning may open up some areas enough to provide opportunities for creation of illegal ORV routes through completed units later in the season.

- **Timber:** A timber report was prepared on 01/08/2014. The proposed prescribed burning should have positive affects in increasing level of aspen sprouting. Levels of sprouting will be influenced by the health of aspen root systems following extended drought and continued browsing. Aspen sprouts are highly palatable to wild ungulates. Where browsing pressure is heavy the ultimate success of aspen regeneration can be highly dependent on ungulate density and the size of the treated unit. Larger units have more potential to withstand browsing pressure and isolated transitional zone stands with new regeneration are especially attractive to browsing ungulates and can concentrate use.

The proposed burning has the very desirable potential to regenerate up to 120 – 240 acres to an early forested seral stage to a higher percentage of aspen in a mosaic pattern scattered over 402 acres. Monitoring the results of the timber burns through regeneration surveys will provide needed data on aspen response and be invaluable for planning future aspen management.

DESIGN CRITERIA AND MITIGATION MEASURES

Heritage/Cultural Resources: The following units (or portions of the following units) need to be surveyed for cultural resources. Site protection measures, if needed, will be identified then.

Table 2: Areas Needing Cultural Resource Surveys

Unit #	Acres Needing Cultural Resource Survey
4	28.5
5	9.9
2a	10.7
17	21.1
18/18a	49.2
Total	119.4 acres

- 48CR1269: Mitigation Measures: Complete survey; determine if mitigation measures are needed at that time.
- 48CR5401: Mitigation Measures: The prescribed fire is allowed to burn across the site. No fire line construction, fire suppression methods, or off-road vehicle use should occur within site boundaries. 48CR5401 will be revisited post-burn by the heritage crew to assess impacts to the site.
- 48CR5415: Mitigation Measures: The prescribed fire is allowed to burn across the site. No fire line construction, fire suppression methods, ground disturbance, or off-road vehicle use should occur within site boundaries. 48CR5415 will be revisited post-burn by the heritage crew to assess impacts to the site.
- 48CR5418: Mitigation Measures: No prescribed burning is permitted on-site. The site is located 150 meters outside a burn unit. If needed, efforts should be made to make sure the fire does not extend into the site. No ground disturbing activities are allowed within the site boundary.
- 48CR5419: Mitigation Measures: The prescribed fire is allowed to burn across the site. No fire line construction, fire suppression methods, ground disturbance, or off-road vehicle use should occur within site boundaries. 48CR5419 will be revisited post-burn by the heritage crew to assess impacts to the site.
- 48CR5421: Mitigation Measures: This site will need to be protected from the burn. No ground disturbing activities are allowed within the site boundary.
- 48CR5425: Mitigation Measures: The prescribed fire is allowed to burn across the site. No fire line construction, fire suppression methods, ground disturbance, or off-road vehicle use should occur within site boundaries. 48CR5425 will be revisited post-burn by the heritage crew to assess impacts to the site.

- 48CR5427: Mitigation Measures: The prescribed fire is allowed to burn across the site. No fire line construction, fire suppression methods, ground disturbance, or off-road vehicle use should occur within site boundaries. 48CR5427 will be revisited post-burn by the heritage crew to assess impacts to the site.
- 48CR5435: Mitigation Measures: The prescribed fire is allowed to burn across the site. No fire line construction, fire suppression methods, ground disturbance, or off-road vehicle use should occur within site boundaries. 48CR5435 will be revisited post-burn by the heritage crew to assess impacts to the site.
- 48CR6232: Mitigation Measures- The site is located outside the burn units and should not be impacted by the project. No fire line construction, fire suppression methods, ground disturbance, or off-road vehicle use should occur within site boundaries.

Fisheries:

- Where possible, avoid direct ignition in riparian and wetland areas, but allow fire to burn into these areas in a mosaic pattern if it meets project objectives and contributes to desired future condition.
- Locate staging areas and refueling locations at least 100 feet away from streams and wetlands.

Hydrology:

- Avoid direct ignition in riparian and wetland areas, but allow fire to burn into these areas in a mosaic pattern.
- Locate staging areas and refueling locations at least 100 feet away from streams and wetlands.
- Avoid use in wetlands, riparian areas, and near streams.
- Cross stream channels at right angles where stream channel and banks area well armored.
- Avoid running up and down steep slopes to avoid creating tracks which could later erode.
- Reclaim any temporary access routes to preclude future unauthorized use; sign as “closed to motorized use” if the route is apparent and may be used by the public.

Firelines:

- When locating fireline, avoid springs, bogs, and other wet areas.
- Do not construct lines through stream channels. Stop the line short of the streambank, cross the stream and begin constructing line above the other streambank.
- Avoid building fireline parallel to streams and within the riparian area. It will usually be less impact to the stream to burn a few more acres of watershed than to have a dozer line parallel to the stream channel for a significant distance.
- Avoid construction of firelines straight up or down slopes, mitigate with waterbars where necessary.
- Avoid traversing across a slope so steep that is necessary to excavate the fire line resulting in a cut and fill slope that will require extensive and complicated rehabilitation.
- Scarify to mineral soil, but not deeper than necessary. Do not build trenches that will drain to the streams.

- Waterbars should be installed, during construction of fireline, at a 30 to 45 degree angle on all firelines constructed on slopes greater than 10 percent. Height of waterbars should generally not exceed 6 inches for handline and 18 inches for dozer-line. Space 50 feet apart on slopes greater than 30 percent and 100 feet apart on slopes between 10 and 30 percent. The downslope side of the waterbar needs to be opened and of adequate length to allow free flow of water off the fire line. Water bars should be designed to utilize natural terrain features as feasible.

Range:

- Protect fences within and bordering burn units.
- Schedule prescribed burning, where possible, to minimize the number of consecutive years a pasture or allotment will have to be grazed late or rested to allow for burn recovery. For example, if all proposed burn units cannot be accomplished in one year, group them by allotment or pasture instead of scattering them on multiple allotments.
- Minimize fire in secondary burn units. These sites were dropped from an initial list of primary burn units because they have slope, aspect, soils and vegetation features that make them more susceptible to cheatgrass infestation or because they already have relatively low shrub density and are in good ecological condition.
- Clean ground vehicles used in implementation and monitoring of mud and other debris that might contain weed seeds before those vehicles are brought into the project area.
- Defer livestock grazing for at least one year on prescribed burns until after most herbaceous forage plants have matured and set seed. Vegetation response on the burn the first year will determine if a second year of deferment is needed.
- Install temporary fencing around burned aspen/conifer clones if monitoring indicates livestock browsing use of young aspens is jeopardizing regeneration of a new stand.
- Protect Hartt Creek Permanent Transect C2 (located in Section 24, T15N, R87W) from prescribed fire to allow for long term monitoring of canopy cover on an untreated big sagebrush site. It is located in a Secondary burn unit (2a).

PUBLIC INVOLVEMENT

This action was originally listed on the Medicine Bow-Routt National Forests & Thunder Basin National Grassland Schedule of Proposed Actions on November 26, 2013 and updated periodically during the analysis. The proposal was provided to the public and other agencies for comment during the scoping & official comment period, Dec. 14, 2013 through Jan. 15, 2014.

FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS

This decision is consistent with the Medicine Bow National Forest Revised Land and Resource management Plan, December 2003. This action complies fully and is consistent with the goals and objectives of the Forest Plan, Forest-wide General Direction and Standards and Guidelines, Management Area direction, and Colorado Roadless Rule.

IMPLEMENTATION DATE

The approved activities within this decision are not subject to appeal in accordance with the Consolidated Appropriations Act of 2014, Pub. L. No. 113-76, 128 Stat. 5 (2014) and can be implemented immediately. Section 431 of the Act directs that the 1993 and 2012 legislation establishing the 36 CFR 215 (post-decisional appeals) and 36 CFR 218 (pre-decisional objections) processes “shall not apply to any project or activity implementing a land and resource management plan...that is categorically excluded...under the National Environmental Policy Act (NEPA).”

CONTACT

For additional information concerning this decision, contact: Mick Hood, District FMO, US Forest Service, 2171 S HWY 130/PO Box 249, Saratoga, WY 82331, (307) 326-2517, mhood@fs.fed.us.

/s/ Melanie B. Fullman

March 27, 2014

MELANIE B. FULLMAN

Date

District Ranger

Disclaimer:

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